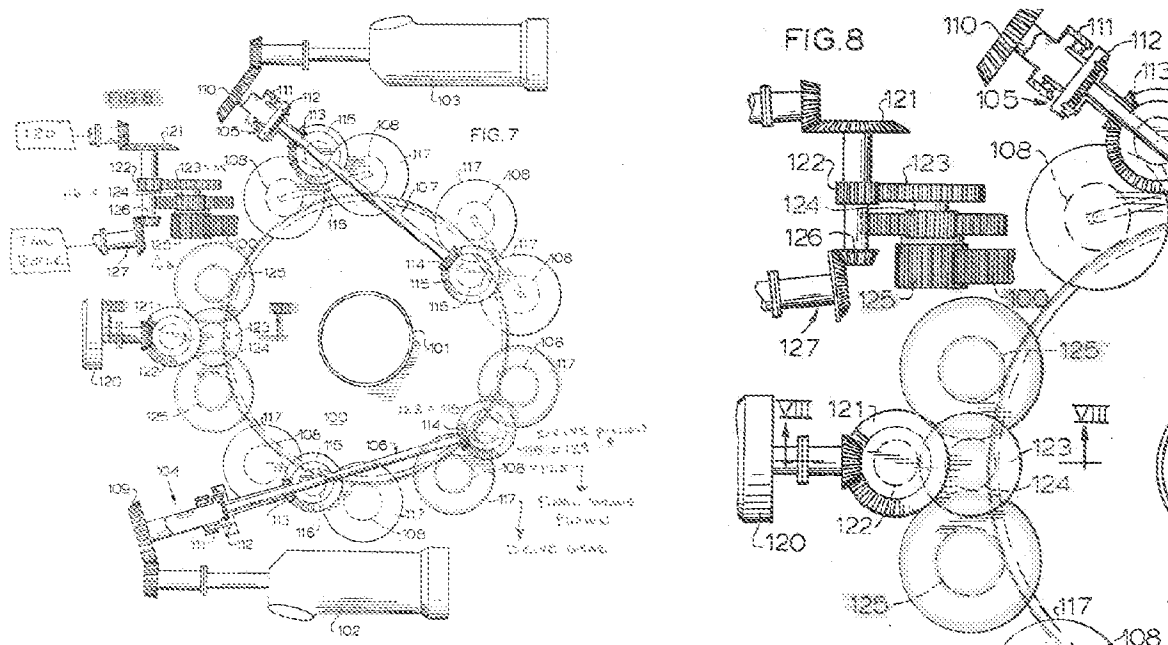


REMARKS

Applicant wishes to thank the Examiner for the detailed remarks. Claims 28-37 stand withdrawn. Claims 1, 3-19, 21-24 and 28-45 remain pending.

35 U.S.C. §102

Claims 1, 3, 4, 12, 16-19, 21-24, 38 and 41-44 stand rejected under 35 U.S.C. §102(b) as being anticipated by *White* (4489625). Applicant respectfully traverses this rejection.



The Examiner identifies the following features of *White*:

- A floating pinion gear (i.e., Fig. 7, element 116) driven by a radially unsupported pinion shaft mounted to the face gear, the floating pinion gear meshed with the first spur gear and the second spur gear, and the floating pinion gear mounted for rotation about a floating pinion axis of rotation which provides a resilient characteristic (i.e., Fig. 7; column 11, lines 26-43);
- Wherein a displacement envelope within which the floating pinion gear axis of rotation may be displaced is non-linear (i.e., column 11, lines 26-37);

The Examiner attempts to interpret the Col. 11, lines 26-35 section of *White* as disclosing a displacement envelope.

second stage reduction bevel gears 115. In the lower half of FIG. 7, each of the two second stage reduction bevel gears 115 and attached pinions 116 is on a line joining the axes of the corresponding adjacent final drive pinions 108. When the axis of the drive pinion 116 is collinear with the axes of the two dual drive gears 117 it powers, equal load-sharing between the two meshes and, consequently, the two associated final drive pinions 108 can be effected by allowing the drive pinion 116 to float freely between the two driven gears 117, its driving position set by the balance of two diametrically opposed mesh forces. Therefore, the dual drive arrangements shown in the lower half of FIG. 7 associated with the side engine 102 and also the collinear dual drive arrangement connected with the central engine 120, do not require a separate tooth load equalizer mechanism, such as the balance beam device 58 referred to above.

[Col. 11, lines 26-43]

White, however, simply fails to disclose a displacement envelope of any sort. No side view of drive pinions 116 and dual drive gears 117 are provided such that the best representation thereof is that shown in Figure 8. Initially, the close spacing of second stage reduction gear 123 and drive pinion 124 simply prevents: a displacement envelope within which said floating pinion gear axis of rotation may be displaced through flexing of said radially unsupported pinion shaft as recited and claimed by Applicant. That is, the shaft portion between gear 123 and gear 124 does not provide for flexing as interpreted by the Examiner but may provide for axial movement of the unit to load balance as contended by Applicant.

The Examiner also apparently argues that the floating pinion gear is mounted to the radially unsupported pinion shaft in a cantilever manner with reference to Figure 5 in addition to Figure 7.

- ♦ Wherein the floating pinion gear is mounted to the radially unsupported pinion shaft in a cantilever manner (i.e., Fig. 7 or Fig. 5);

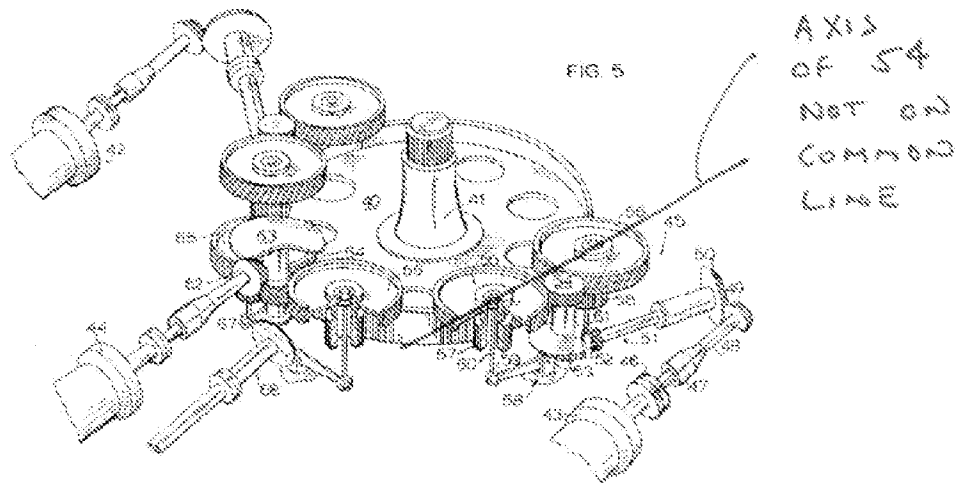


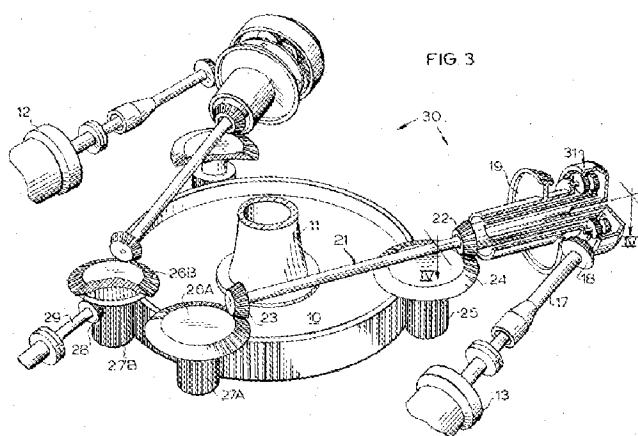
Figure 5, however, fails to disclose or suggest any pinion gear on a common line between driven gears as referenced by *White* at lines 26-43 (lower half of Figure 7). Figure 5 also does not support the Examiner's contention that drive pinion 116 discloses or suggests a displacement envelope.

The Examiner Fails to Identify A Radially Unsupported Pinion Shaft

The Examiner fails to specifically identify a radially unsupported pinion shaft upon which the Examiner relies in *White*. The Examiner only references a shaft in passing as follows:

- Wherein the radially unsupported pinion shaft is driven through a gear mesh (i.e., Fig. 7, being the meshing of the spiral bevel gear teeth arrangement of gear elements 114 and 115) generally transverse to the floating pinion axis of rotation (i.e., Fig. 7);

However, as discussed above, no side view is provided which illustrates a shaft of any sort nor does the Examiner recite a reference numeral which identifies a shaft in *White*. In fact, a shaft may even be completely avoided by *White* by having a drive pinion 27A mounted directly to a reduction beveled gear 26A such as that illustrated in Figure 3.



The Examiner apparently relies upon the silence of *White* and attempts to receive the benefit of ambiguity with regard to identification of a shaft. This is improper.

Again, Applicant specifically claims: a floating pinion gear mounted to a radially unsupported pinion shaft in a cantilever manner . . . to define a displacement envelope within said floating pinion gear axis of rotation may be displaced through flexing of said radially unsupported pinion shaft. *White* simply fails to disclose or suggest this feature. Applicant respectfully requests reconsideration of the rejection for at least this reason as well.

Claim 24

Claim 24 specifically recites that the displacement envelope is generally diamond shaped. Such a specific displacement envelope is neither disclosed nor suggested by *White*.

35 U.S.C. §103

Claims 5-11, 13-15, 39, 40, and 45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *White* in view of *Kish* (5813292). The Examiner admits that *White* fails to disclose:

White discloses the limitations as set forth in paragraph 7 above. Regarding claims 5-11, 13-15, 39, 40 and 45, *White* lacks:

- A first double helical gear driven by the first spur gear;
- A second double helical gear driven by the second spur gear; and
- Wherein the first double helical gear is of a smaller diameter than the first spur gear and the second double helical gear is of a smaller diameter than the second spur gear.

The Examiner then relies upon *Kish* as follows:

Kish (i.e., Figs. 1-2 and 6; column 1, line 50 — column 13, line 62), on the other hand, teaches a split path transmission system comprising:

- A first double helical gear (i.e., Fig. 1, element 118L Fwd or 118R Fwd) driven by the first spur gear;
- A second double helical gear (i.e., Fig. 1, element 118L Fwd or 118R Fwd) driven by the second spur gear; and
- Wherein the first double helical gear is of a smaller diameter than the first spur gear and the second double helical gear is of a smaller diameter than the second spur gear (i.e., Fig. 1).

White makes no reference whatsoever to a double helical gear arrangement as admitted by the Examiner. The Examiner interprets *White* element 117 as the first spur gear.

- A first spur gear (i.e., Fig. 7, element 117, and column 5, lines 15-18) mounted for rotation about a first spur gear axis of rotation (see Fig. 8);

Initially, the Examiner refers to Figure 8 to define the first spur gear axis of rotation, however, element 117 is not shown in Figure 8. At best, element 124 may be equivalent to element 116, element 123 may be equivalent to element 115, and element 125 may be equivalent to element 108. It is therefore unclear which element that the Examiner refers to as the first spur gear. That is, element 125 of *White* meshes with combiner gear 100, but the gear which is connected to gear 125 (represented by gear 117) is already larger than gear 125 (represented by gear 108). This discrepancy further supports Applicant's contention that the Examiner is merely picking and choosing particular gear components in an attempt to recreate Applicant's gear box. This is improper.

The Examiner admits that final drive pinion 108 which is engaged with the combiner gear 100 is smaller than the drive gears 117. The Examiner must thus not only suggest a particular double helical gear be utilized to replace the gear of *White*, but also that the relative sizes thereof be reversed. The Examiner's motivation to do so is "in order to provide an effect equal torque splitting transmission." This is a mere conclusionary statement and is not proper motivation. The only motivation to make the combination as proposed is by following the knowledge disclosed within the present application. This is impermissible usage of hindsight in an attempt

to recreate Applicant's gear box. Whereas a gear box necessarily requires a gear mesh interface between each of the geared components, the Examiner's attempt to extract piecemeal particular features of one gear system and replace with another cannot be supported by such a mere conclusionary motivation. Applicant respectfully requests reconsideration of these rejections.

Applicant respectfully submits that this case is in condition for allowance. If the Examiner believes that a teleconference will facilitate moving this case forward to being issued, Applicant's representative can be contacted at the number indicated below.

Respectfully Submitted,

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